



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,958	07/24/2001	Brian S. Hooker	059440-0138	3645

7590 07/01/2003

DAVID G. LATWESSEN, PH.D.  
WELLS ST JOHN P.S.  
601 W. FIRST AVENUE  
SUITE 1300  
SPOKANE, WA 99201-3828

EXAMINER

BAUM, STUART F

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 07/01/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/910,958

Applicant(s)

HOOKE ET AL.

Examiner

Stuart F. Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 22 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 45-69 is/are pending in the application.
- 4a) Of the above claim(s) 50-52, 56, 57, 62, 63, 66 and 67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 45-49, 53-55, 58-61, 64, 65, 68 and 69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. The amendment filed 4/22/2003 has been entered.

Claims 45-69 are pending.

Claims 1-44 have been canceled.

Claims 45-69 have been newly added.

2. Newly submitted claims 50-52, 56-57, 62-63, and 66-67 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 50-52, 56-57, 62-63 and 66-67 are drawn to heat and CO<sub>2</sub> inducible promoters which are not part of the originally elected invention which includes light inducible promoters. Claims 56-57 are drawn to an expression system which is not part of the originally elected invention comprising a method of producing a heterologous protein.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 50-52, 56-57, 62-63 and 66-67 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. Claims 45-49, 53-55, 58-61, 64-65 and 68-69 are examined in the present office action.
4. The text of those sections of Title 35, U.S. Code not included in this office action can be found in a prior office action.

Art Unit: 1638

5. Rejections and objections not set forth below are withdrawn.

6. This application contains claims 50-52, 56-57, 62-63 and 66-67 drawn to an invention nonelected with traverse in Paper No. 9. A complete reply to the final rejection must include cancelation of nonelected claims (37 CFR 1.144) See MPEP § 821.01.

#### *Claim Objections*

7. Claims 46, 53, and 59 are objected to for reciting on non-elected inventions. Applicant is requested to amend the claims to not read on the non-elected inventions.

#### *Indefiniteness*

8. Claims 45-49, 53-55, 58-61, 64-65, and 68-69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Dependent claims are also rejected.

In claim 45, the metes and bounds of "defining a set of controlled conditions" have not been defined. It is unclear what the limits of the controlled conditions are given Applicants broad recitation that encompasses an infinite number of conditions. All subsequent recitations of "defining a set of controlled conditions" are also rejected.

In claim 45, the metes and bounds of "collecting" have not been defined. It is unclear if the protein has to be extracted from the tissue or if the protein is removed from the outside of the plant.

In claim 55, the word "a" and "plant" need to be inserted before and after the word "mustard", respectively.

In claim 55, the recitation "mustard" is unclear. "Mustard" is the common name for many "weedy" plants in the family Brassicaceae. It is suggested that Applicant replace the word "mustard" with the genus and species name of the plant of interest.

In claim 58, the metes and bounds of "a set of controlled conditions" is undefined. All subsequent recitations of "a set of controlled conditions" is also rejected.

In claim 64, amend "a crop of transgenic plants" to "a transgenic plant". It is unclear how a crop can have a single nucleic acid sequence.

In claim 64, the recitation "inducible by an inducing condition....plant" is unclear. Applicant has not stated what constitutes the inducing condition. Applicant has not given any type of indication what constitutes the "value". Is the "value a numerical value, qualitative or quantitative value, or condition, that represents the inducing condition?

In claim 68, the metes and bounds of a "hydroponic system" have not been defined.

In claim 69, the metes and bounds of an "aerosol delivery system" have not been defined.

***35 USC 102(b)***

9. Claims 45, 47, 58, 60, 64, and 68-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Rose et al (January, 1999, U.S. Patent 5,861,277).

New claims 68 and 69 recite a protein production system which includes a hydroponic and aerosol delivery system. Given the 112 2<sup>nd</sup> paragraph indefiniteness discussed above, the

Art Unit: 1638

Office interprets these systems as a means to supply fertilizer to plants and a means to increase humidity; both of which are inherent to all growth chamber/greenhouse growing facilities.

Given that Applicant has not supplied arguments pertaining to this rejection, the rejection is maintained for the reasons of record set forth in the Official action mailed 1/16/2003.

10. Claims 45, 47, 58, 60, 64, and 68-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Thiele, et al (1999, Plant Physiology 120:73-81, listed in IDS).

New claims 68 and 69 recite a protein production system which includes a hydroponic and aerosol delivery system. Given the 112 2<sup>nd</sup> paragraph indefiniteness discussed above, the Office interprets these systems as a means to supply fertilizer to plants and a means to increase humidity; both of which are inherent to all growth chamber/greenhouse growing facilities.

Given that Applicant has not supplied arguments pertaining to this rejection, the rejection is maintained for the reasons of record set forth in the Official action mailed 1/16/2003.

### ***35 USC 103***

11. Claims 45-49, 53, 54, 58-61, 64, 65, and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rose et al (January, 1999, U.S. Patent 5,861,277) as applied to claims 16-17 above, and further in view of Fladung et al (1993 Plant Molecular Biology 23:749-757 listed in IDS) taken with Soper et al (July, 1999, U.S. Patent Number 5,920,002).

Given that Applicant has not supplied arguments pertaining to this rejection, the rejection is maintained for the reasons of record set forth in the Official action mailed 1/16/2003.

Art Unit: 1638

12. Claims 45-49, 53, 54, 58-61, 64, 65, and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thiele, et al (1999, Plant Physiology 120:73-81, listed in IDS) as applied to claims 29-30, and 32 above, and further in view of Fladung et al (1993 Plant Molecular Biology 23:749-757 listed in IDS) taken with Soper et al (July, 1999, U.S. Patent Number 5,920,002).

Given that Applicant has not supplied arguments pertaining to this rejection, the rejection is maintained for the reasons of record set forth in the Official action mailed 1/16/2003.

13. Claims 45, 47, 55, 58, 60, 64, and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thiele, et al (1999, Plant Physiology 120:73-81, listed in IDS) as applied to claims 29-30, and 32 above, and further in view of Dehesh et al (December, 1998, U.S. Patent Number 5,850,022).

Given that Applicant has not supplied arguments pertaining to this rejection, the rejection is maintained for the reasons of record set forth in the Official action mailed 1/16/2003.

14. No claims are allowed.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 1638

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart Baum whose telephone number is (703) 305-6997. The examiner can normally be reached on Monday-Friday 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 or (703) 305-3014 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who may be contacted at 308-0196.

Stuart F. Baum Ph.D.

June 20, 2003

*Phuong T. Bui*  
PHUONG T. BUI  
PRIMARY EXAMINER

*6/25/03*